PCT

RAW SEQUENCE LISTING DATE: 09/20/2004
PATENT APPLICATION: **US/10/507,232** TIME: 13:39:20

Input Set : **A:\07917-166US1.txt**
Output Set: **N:\CRF4\09172004\J507232.raw**


```
 4 <110> APPLICANT: Green, Michael R.
 5       Gollan, Timothy J.
 8 <120> TITLE OF INVENTION: ALTERING VIRAL TROPISM
11 <130> FILE REFERENCE: 07917-166US1
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/507,232
C--> 13 <141> CURRENT FILING DATE: 2004-09-08
13 <150> PRIOR APPLICATION NUMBER: PCT/US03/07323
14 <151> PRIOR FILING DATE: 2003-03-07
16 <150> PRIOR APPLICATION NUMBER: US 60/362,655
17 <151> PRIOR FILING DATE: 2002-03-08
19 <160> NUMBER OF SEQ ID NOS: 26
21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 14
25 <212> TYPE: PRT
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: concensus sequence
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32 Ile Glu Gly Pro Thr Leu Arg Gln Trp Leu Ala Ala Arg Ala
33  1               5                  10
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 5
37 <212> TYPE: PRT
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <223> OTHER INFORMATION: binding peptide sequence
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45  1               5
47 <210> SEQ ID NO: 3
48 <211> LENGTH: 7
49 <212> TYPE: PRT
50 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <223> OTHER INFORMATION: kidney targeting sequence
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57  1               5
59 <210> SEQ ID NO: 4
60 <211> LENGTH: 1980
61 <212> TYPE: DNA
62 <213> ORGANISM: Murine leukemia virus
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64 <400> SEQUENCE: 4
65 aattcttctg atgctcagag gggtcagtac tgcttcgccc ggctccagtc ctcatcaagt 60
66 ctataatatc acctgggagg taaccaatgg agatcgggag acggtatggg caacttctgg 120
67 caaccaccct ctgtggacct ggtggcctga ccttacccca gatttatgta tgttagccca 180
68 ccatggacca tcttattggg ggctagaata tcaatcccct ttttcttctc ccccggggcc 240
69 cccttgttgc tcaggggggca gcagcccagg ctgttccaga gactgcgaag aacctttaac 300
70 ctccctcacc cctcggtgca acactgcctg gaacagactc aagctagacc agacaactca 360
71 taaatcaaat gagggatttt atgtttgccc cgggccccac cgcccccgag aatccaagtc 420
72 atgtgggggt ccagactcct tctactgtgc ctattggggc tgtgagacaa ccggtagagc 480
73 ttactggaag ccctcctcat catgggattt catcacagta aacaacaatc tcacctctga 540
74 ccaggctgtc caggtatgca aagataataa gtggtgcaac cccttagtta ttcggtttac 600
75 agacgccggg agacgggtta cttcctggac cacaggacat tactggggct tacgtttgta 660
76 tgtctccgga caagatccag ggcttacatt tgggatccga ctcagatacc aaaatctagg 720
77 accccgcgtc ccaatagggc caaaccccgt tctggcagac caacagccac tctccaagcc 780
78 caaacctgtt aagtcgcctt cagtcaccaa accacccagt gggactcctc tctcccctac 840
79 ccaacttcca ccggcgggaa cggaaaatag gctgctaaac ttagtagacg gagcctacca 900
80 agccctcaac ctcaccagtc ctgacaaaac ccaagagtgc tggttgtgtc tagtagcggg 960
81 acccccctac tacgaagggg ttgccgtcct gggtacctac tccaaccata cctctgctcc 1020
82 agccaactgc tccgtggcct cccaacacaa gttgaccctg tccgaagtga ccggacaggg 1080
83 actctgcata ggagcagttc ccaaaacaca tcaggcccta tgtaatacca cccagacaag 1140
84 cagtcgaggg tcctattatc tagttgcccc tacaggtacc atgtgggctt gtagtaccgg 1200
85 gcttactcca tgcatctcca ccaccatact gaaccttacc actgattatt gtgttcttgt 1260
86 cgaactctgg ccaagagtca cctatcattc ccccagctat gtttacggcc tgtttgagag 1320
87 atccaaccga cacaaaagag aaccggtgtc gttaaccctg gccctattat tgggtggact 1380
88 aaccatgggg ggaattgccg ctggaatagg aacagggact actgctctaa tggccactca 1440
89 gcaattccag cagctccaag ccgcagtaca ggatgatctc agggaggttg aaaaatcaat 1500
90 ctctaaccta gaaaagtctc tcacttccct gtctgaagtt gtcctacaga atcgaagggg 1560
91 cctagacttg ttatttctaa aagaaggagg gctgtgtgct gctctaaaag aagaatgttg 1620
92 cttctatgcg gaccacacag gactagtgag agacagcatg gccaaattga gagagaggct 1680
93 taatcagaga cagaaactgt ttgagtcaac tcaaggatgg tttgagggac tgtttaacag 1740
94 atccccttgg tttaccacct tgatatctac cattatggga cccctcattg tactcctaat 1800
95 gattttgctc ttcggaccct gcattcttaa tcgattagtc caatttgtta aagacaggat 1860
96 atcagtggtc caggctctag ttttgactca acaatatcac cagctgaagc ctatagagta 1920
97 cgagccatag ataaaataaa agattttatt tagtctccag aaaaaggggg gaatgaaaga 1980
99 <210> SEQ ID NO: 5
100 <211> LENGTH: 7
101 <212> TYPE: PRT
102 <213> ORGANISM: Artificial Sequence
104 <220> FEATURE:
105 <223> OTHER INFORMATION: kidney targeting sequence
107 <400> SEQUENCE: 5
108 Cys Gly Ala Arg Glu Met Cys
109 1 5
111 <210> SEQ ID NO: 6
112 <211> LENGTH: 9
113 <212> TYPE: PRT
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: brain targeting sequence

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<400> SEQUENCE: 6
Cys Leu Ser Ser Arg Leu Asp Ala Cys
1 5
<210> SEQ ID NO: 7
<211> LENGTH: 21
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: brain targeting sequence
<400> SEQUENCE: 7
Trp Arg Cys Val Leu Arg Glu Gly Pro Ala Gly Gly Cys Ala Trp Phe
1 5 10 15
Asn Arg His Arg Leu
20
<210> SEQ ID NO: 8
<211> LENGTH: 13
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated peptide
<400> SEQUENCE: 8
Cys Ala Ala Ala Gly Arg Gly Asp Ser Pro Thr Arg Cys
1 5 10
<210> SEQ ID NO: 9
<211> LENGTH: 39
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated oligonucleotide
<400> SEQUENCE: 9
tgcgcggccg ctggccgtgg cgattctccc acgcgttgt 39
<210> SEQ ID NO: 10
<211> LENGTH: 39
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated oligonucleotide
<400> SEQUENCE: 10
acaacgcgtg ggagaatcgc cacggccagc ggccgcgca 39
<210> SEQ ID NO: 11
<211> LENGTH: 21
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetically generated peptide
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Cys Ala Ala Ala Gln Gly Ala Thr Phe Ala Leu Arg Gly Asp Asn Pro
1 5 10 15
Gln Gly Thr Arg Cys

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Input Set : **A:\07917-166US1.txt**
Output Set: **N:\CRF4\09172004\J507232.raw**

183 20
185 <210> SEQ ID NO: 12
186 <211> LENGTH: 50
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
193 <400> SEQUENCE: 12
194 ggccgctcaa ggcgcaacgt tcgcgctcag aggcgataat ccacagggga 50
196 <210> SEQ ID NO: 13
197 <211> LENGTH: 50
198 <212> TYPE: DNA
199 <213> ORGANISM: Artificial Sequence
201 <220> FEATURE:
202 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
204 <400> SEQUENCE: 13
205 cgcgtcccct gtggattatc gcctctgagc gcgaacgttg cgccttgagc 50
207 <210> SEQ ID NO: 14
208 <211> LENGTH: 6
209 <212> TYPE: PRT
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: Synthetically generated peptide
215 <400> SEQUENCE: 14
216 Gly Arg Gly Asp Ser Pro
217 1 5
219 <210> SEQ ID NO: 15
220 <211> LENGTH: 14
221 <212> TYPE: PRT
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Synthetically generated peptide
227 <400> SEQUENCE: 15
228 Gln Gly Ala Thr Phe Ala Leu Arg Gly Asp Asn Pro Gln Gly
229 1 5 10
231 <210> SEQ ID NO: 16
232 <211> LENGTH: 22
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
239 <400> SEQUENCE: 16
240 ttttgtcaag accgacctgt cc 22
242 <210> SEQ ID NO: 17
243 <211> LENGTH: 22
244 <212> TYPE: DNA
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Synthetically generated oligonucleotide

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Input Set : **A:\07917-166US1.txt**
Output Set: **N:\CRF4\09172004\J507232.raw**

250 <400> SEQUENCE: 17
251 cgggagcggc gataccgtaa ag 22
253 <210> SEQ ID NO: 18
254 <211> LENGTH: 21
255 <212> TYPE: PRT
256 <213> ORGANISM: Artificial Sequence
258 <220> FEATURE:
259 <223> OTHER INFORMATION: Synthetically generated peptide
261 <400> SEQUENCE: 18
262 Cys Ala Ala Ala Glu Gln Arg Leu Gly Asn Gln Trp Ala Val Gly His
263 1 5 10 15
264 Leu Met Thr Arg Cys
265 20
267 <210> SEQ ID NO: 19
268 <211> LENGTH: 47
269 <212> TYPE: DNA
270 <213> ORGANISM: Artificial Sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
275 <400> SEQUENCE: 19
276 ggccgagcag cgcctgggca accagtgggc cgtcggccac ctgatga 47
278 <210> SEQ ID NO: 20
279 <211> LENGTH: 47
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
286 <400> SEQUENCE: 20
287 cgcgtcatca ggtggccgac ggcccactgg ttgcccaggc gctgctc 47
289 <210> SEQ ID NO: 21
290 <211> LENGTH: 71
291 <212> TYPE: DNA
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
297 <400> SEQUENCE: 21
298 ggccgcttca caccttgtaa agtgcgcaga gaaggaaaag acgttctgcg tcaacggcgt 60
299 gagtgttaca g 71
301 <210> SEQ ID NO: 22
302 <211> LENGTH: 84
303 <212> TYPE: DNA
304 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: Synthetically generated oligonucleotide
309 <400> SEQUENCE: 22
310 gccgtaggtc ttaaccctgt aacactcacc gccgttgacg cagaacgtct ttccttctc 60
311 tgcgcacttt acaaggtgtg aagc 84
313 <210> SEQ ID NO: 23
314 <211> LENGTH: 83

VERIFICATION SUMMARY DATE: 09/20/2004
PATENT APPLICATION: **US/10/507,232** TIME: 13:39:21

Input Set : **A:\07917-166US1.txt**
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L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date